

8-Mar-02											
Alvarion 5.8 GHz Spread Spectrum											
FCC ID: LKT-DS58											
Calculate mW/cm² here. Enter frequency in MHz:											
RF Hazard Distance Calculation											
Calculation of Limits from 1.1310 Table 1											
Controlled Uncontrolled											
Ave 6 min Ave 30 min											
mW/cm² from Table1:	1.00				F(MHz)	Actual F, MHz		Occ, mW/cm²	Gen, mW/cm²		
					0.3-3	1		100.0	100.0		
Max RF Power	TX Antenna	MPE			3.0 - 30.0	30		30.0	6.0		
P, dBm	G, dBi	Safe Distance, cm			30.0-300	20		1.0	0.2		
					300-1500	869		2.9	0.58		
24.2	7.5	10.8	omni		1500-100000	1500		5.0	1.0		
24.2	18.0	36.3	p2p sector								
18.0	18.0	17.8	p2mp sector								
24.2	29.0	128.9	p2p 2ft dish								
24.2	21.0	51.3	p2p integral		Enter P(watts)	Equivalent d	Enter dBm	Equivalent Watts			
Basis of Calculations:											
					4	36.0	36.0	4.0			
$E^2/3770 = S, \text{ mW/cm}^2$											
$E, \text{ V/m} = (P\text{watts} * G\text{gain} * 30)^{.5}/d, \text{ meters}$											
$d = ((P\text{watts} * G * 30) / 3770 * S)^{.5}$ $P\text{watts} * G\text{gain} = 10^{(P\text{dBm} - 30 + G\text{dBi})/10}$											
NOTE: For mobile or fixed location transmitters, minimum separation distance is 20 cm, even if calculations indicate MPE distance is less											

d